

REMARKS

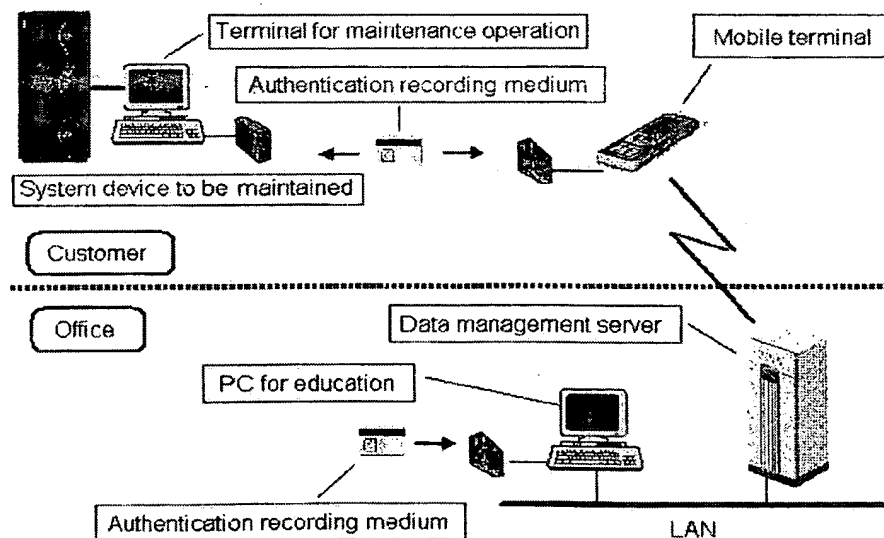
Claim 17 remains in the application. Claims 18 – 24 have been canceled. Claim 17 has been amended. Reconsideration of this application in view of the amendments noted is respectfully requested.

Claim 17 has been amended to include the limitations of claims 18 – 24. Accordingly, claims 18 – 24 have been canceled.

In the Office Action, claims 17 – 24 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As an overview, claim 17 claims a system for maintaining qualification of an operator as shown in FIG. 1. The system includes an authentication recording medium 1, a terminal for maintenance operation 7, a first authentication recording medium read/write device 73, a mobile terminal 2, a second authentication recording medium read/write device 21, a communication network 5, a data management server 3, a local area network 6, a PC for learning 4, a third authentication recording medium read/write device 43, and a system or device 8 to be managed or maintained at a work site.

The following schematic drawing is a graphical illustration of the subject matter that is shown in FIG. 1.



As shown in the schematic drawing, the data management server is connected to the PC for education via a local area network (LAN) located in an "Office" and is also connected via a communication network to the mobile terminal which is located at a "Customer" location distant from the "Office." A feature of the presently claimed invention is that the data management server is not directly connected to the terminal for maintenance operation that is at the "Customer" location.

In light of the Office Action's comments and suggestions, claim 17 has been extensively amended to clarify the limitations of the claim, including the limitations that were added from claims 18 – 24.

More specifically, for consistency a "maintenance operation terminal" has been amended to read a --terminal for maintenance operation-- throughout claim 17. It is noted that both terms referred to the same element and were not intended to be separate limitations.

Further, with respect to the recitation "a terminal for maintenance operation of an object system or device at work sites," this recitation has been amended to read --a terminal for maintenance operation for managing and maintaining a system or device at a work site--. The word "object" has been deleted to avoid any confusion it may have caused. A "system or device" refers to, for example, a server and/or external disks (memory devices). The "system or device" is located at a "work site," e.g., onsite at a customer/client location, place of business, etc. For example, see paragraphs [0001] and [0002] of the publication of the present application (U.S. Patent Application Pub. No. 2004/0225882). For sake of clarity, "work sites" has been amended to read --work site--. The "terminal for maintenance operation" allows an operator (i.e., person) to manage and/or maintain the server/external disks by performing maintenance operations (e.g., operations necessary to maintain the proper functioning of the server/external disks). The operator is authorized to perform the maintenance operations via the authentication recording medium (i.e., an electronic memory device that the operator can carry on his/her person). For example, see paragraphs [0008], [0020], and [0033] – [0035] of the publication of the present application.

With respect to the "authentication recording medium read/write device," the present system for maintaining qualification of an operator includes three authentication recording

medium read/write devices. Therefore, for clarity, the authentication recording medium read/write devices have been signified as --first--, --second--, and --third--. The first authentication recording medium read/write device is associated with the terminal for maintenance operation, the second authentication recording medium read/write device is associated with the mobile terminal, and the third authentication recording medium read/write device is associated with the PC for learning. Each authentication recording medium read/write device is cooperable with the authentication recording medium. For example, the authentication recording medium may be inserted into/connected to/synched with each authentication recording medium read/write device. Each authentication recording medium read/write device can read the readable identification data (data such as operator name, affiliation, password) stored on the authentication recording medium and can read and write skill authentication data (data such as operator qualification level, operational authority of the operator, operation history of the operator, expiration date of qualification level) from and to the authentication recording medium. The terminal for maintenance operation uses the data stored on the authentication recording medium to authenticate the operator to allow the operator to perform a maintenance operation via the terminal for maintenance operation. In this regard, the recitation “the system for maintaining qualification of an operator uses an authentication recording medium to carry out a maintenance operation of object system or device at work sites” has been amended to read --the system for maintaining qualification of an operator uses said authentication recording medium to authenticate an operator to carry out a maintenance operation of said system or device at said work site--. For example, see paragraphs [0040] – [0042] of the publication of the present application.

Further, with respect to the paragraph in claim 17 beginning with “the system for” and ending with “local area network for sending or receiving data,” for clarity the recitation “and is connected to” has been amended to read --and in the system for maintaining qualification of an operator said terminal for maintenance operation is connected to said data management server via said mobile terminal and a communication network, and said data management server is connected to said PC for education via a local area network for

sending or receiving data--. The relationship between these elements of the system is shown in FIG. 1.

Furthermore, with respect to the data management server, the recitation “make a decision and download the decision contents to the authentication recording medium as skill authentication data” has been amended to read --to make operator qualification determinations and to download the qualification level determinations to said authentication recording medium as skill authentication data--. “Decision contents” referred to determinations made regarding an operator’s qualifications. See paragraphs [0052] – [0062] of the publication of the present application.

Moreover, with respect to the PC for education, for sake of clarity the recitation “the PC for education comprises an authentication recording medium data reading/writing application program an educational application program and a work application program which are programs for educating operator” has been amended to read --said PC for education includes an authentication recording medium data reading/writing application program, a work application program, and an educational application program which is a program for educating an operator--. Other limitations in the paragraph of claim 17 beginning with “the PC for education” have been amended in a manner consistent with the rest of the claim.

Also, the limitations incorporated into claim 17 from claims 18 – 24 have been amended in a manner consistent with the preceding remarks.

For these reasons, applicant submits that claim 17 is definite. Claims 18 – 24 have been canceled, thereby obviating the rejection of these claims. Accordingly, applicant respectfully requests that the Section 112, second paragraph rejection of claims 17 – 24 be withdrawn.

Claims 17 – 24 were rejected under 35 U.S.C. 103(a) as being unpatentable over Bly et al. (U.S. Patent Application Pub. No. 2002/0087345, hereinafter “Bly”) in view of Ohno et al. (U.S. Patent No. 7,221,899, hereinafter “Ohno”) and Hobgood et al. (U.S. Patent Application Pub. No. 2003/0132283, hereinafter “Hobgood”). Applicant respectfully traverses this rejection.

With respect to independent claim 17, none of the cited references, either alone or in combination, discloses or fairly suggests a system for maintaining qualification of an operator that uses an authentication recording medium to authenticate an operator to carry out a maintenance operation of a system or device at a work site by inserting the authentication recording medium into a first authentication recording medium read/write device of a terminal for maintenance operation, as in claim 17. Further, none of the cited references, either alone or in combination, discloses or fairly suggests that in a system for maintaining qualification of an operator, the terminal for maintenance operation is connected to a data management server via a mobile terminal and a communication network, and the data management server is connected to a PC for education via a local area network for sending or receiving data, as in claim 17.

A feature of the presently claimed invention is that the data management server is not directly connected to a terminal for maintenance operation located at a customer work site. In contrast, Bly discloses that a work order is transmitted electronically to a handheld device 168 associated with specific maintenance personnel assigned to carry out the maintenance. In this regard, Bly discloses that “device 168 is in real-time two-way communication with analysis controller database 78” (see paragraph [0084] of Bly). Also, in Bly the analysis controller database is directly connected with the local controller via the internet (see FIGS. 3 and 9). However, Bly does not disclose that a terminal for maintenance operation is connected to a data management server via a mobile terminal and a communication network, and the data management server is connected to a PC for education via a local area network for sending or receiving data. Turning to Ohno, Ohno discloses a customer support system including a computer system for introducing training contents from a service providing side to a customer side through a computer network. However, Ohno does not disclose that a terminal for maintenance operation is connected to a data management server via a mobile terminal and a communication network, and the data management server is connected to a PC for education via a local area network for sending or receiving data. Turning to Hobgood, Hobgood discloses a method for utilizing smart cards for storing training and simulation information. However, Hobgood does not disclose that a terminal for

maintenance operation is connected to a data management server via a mobile terminal and a communication network, and the data management server is connected to a PC for education via a local area network for sending or receiving data.

For these reasons, applicant submits that no combination of Bly with Ohno and Hobgood results in the present invention as claimed in claim 17. Therefore, claim 17 is patentable over Bly, Ohno, and Hobgood. Claims 18 – 24 have been canceled, thereby obviating the rejection of these claims. Accordingly, applicant respectfully requests that the Section 103(a) rejection of claims 17 – 24 as being unpatentable over Bly in view of Ohno and Hobgood be withdrawn.

This amendment and request for reconsideration is believed to be fully responsive to the comments and suggestions of the examiner and to place this application in condition for allowance. Favorable action is requested.

Respectfully submitted,

Shinji Ishizuka et al.

Fildes & Outland, P.C.



Christopher J. Fildes, Attorney
Registration No. 32,132
20916 Mack Avenue, Suite 2
Grosse Pointe Woods, MI 48236
(313) 885-1500